REMARKS

The present response is in response to the Notice Of Non-Compliant Amendment dated September 30, 2004. The present amendment contains a listing of the claims including the full text of the withdrawn claims.

Claims 1-13, 22, 38-50 and 57-58 are pending in the application. Claims 1-3, 6-7, 9-11, 38, 41, 45, 50 and 57-58 have been amended. A three-month extension of time, a newly executed declaration by William Szczepaniak, and three date stamped return postcards showing receipt by the Office of the references cited in the Information Disclosure Statement submitted March 19, 2002 were previously submitted. Submitted on September 9, 2004 under separate cover are two (2) boxes of foreign patent and non-patent literature references described herein.

The declaration of the present application was objected to as allegedly being defective because the signature for the full name of one of the inventors appeared unsigned. Applicants submitted a petition under 37 CFR 1.47(a) on September 17, 2001 showing that the non-signing inventor, William Szczepaniak, refused to join in the filing of the above-identified application. On November 19, 2001 Applicants received confirmation from the United States Patent and Trademark Office of the decision granting status under 37 CFR 1.47(a). A copy of the decision granting Rule 1.47(a) status was previously enclosed. Applicants also previously submitted a newly executed declaration signed by William Szczepaniak in compliance with 37 CFR 1.67(a)(2) and a power of attorney also executed by William Szczepaniak.

The Information Disclosure Statement filed March 19, 2002 was objected to as allegedly being incomplete since it appeared to contain only a part of the documents cited in form PTO 1449. Applicants previously submitted copies of the three postcards accompanying the three boxes of references previously submitted with the Information Disclosure Statement filed March 19, 2002. Due to the voluminous number of references cited by Applicants, three boxes of references were submitted to the Office. Each box of references included a return postcard and a copy of the information disclosure statement clearly identifying a total of three boxes of references submitted with the Information Disclosure Statement. As shown on the previously enclosed copies of the

return postcards, each box of references was received by the Office. Due to the voluminous number of cited references, Applicants previously resubmitted copies of the foreign documents and non-patent literature references for the Examiner's review in two separate boxes under separate cover on September 9, 2004. A copy of the transmittal form for each box of resubmitted documents, the date stamped return postcards of the previously submitted references, a copy of the previously submitted Information Disclosure Statement and a copy of the Resubmittal of References Cited in the Information Disclosure Correspondence mailed September 9, 2004 were previously enclosed.

The specification has been objected to as requiring the correction of certain informalities, specifically the change of "SEQ ID No." to "SEQ ID NO." and the change of "SEQ ID Nos." to "SEQ ID NOs.". The specification has been amended throughout to comply with these requested changes. The specification has also been amended on page 21, amending "near 540" to "near 540 nm" as requested by the Examiner. The specification has also been amended on page 27 amending "EM" to "electromagnetic radiation", "UV" to "ultraviolet", and "IR" to "infrared" as requested by the Examiner. Claims 1-3 and 41 have been amended to recite "SEQ ID NO." and/or "SEQ ID NOs.", where appropriate, as requested by the Examiner. Claims 1, 3, 6-7, 9, 11, 38, 41, 45 and 57-58 have been amended to recite "nucleotide sequence" as requested by the Examiner.

35 U.S.C. 112, the second paragraph

Claims 1-13, 22, 38-50 and 57-58 allegedly stand rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

Claim 1 has been amended to recite "or a green fluorescent protein encoded by a nucleic acid molecule of *Renilla reniformis* having at least 80% sequence identity thereto." Basis for the claim amendment can be found, for example, in Claim 1. Accordingly, no issue of new matter is presented.

Claim 3 has been amended to recite "a nucleotide sequence that hybridizes under high stringency having a percentage mismatch of 0.1 x SSPE, 0.1% SDS at 65° C to the nucleotide sequence of (a)". Basis for the claim amendment can be found, for example, on page 42 of the specification. Accordingly, no issue of new matter is presented.

Claim 10 has been amended to depend from claim 9 and to recite "the nucleic acid comprising the cloning site". Proper antecedent basis now exists for the recitation of "the plasmid of claim 9". Claim 50 has also been amended to depend from claim 49. Proper basis now exists for the recitation "the cell of claim 49".

35 U.S.C. 103

Claims 1-13, 22, 38-50 and 57-58 presently stand rejected under 35 USC 103(a) as allegedly being unpatentable over Bryan, B.J. et al., U.S. Patent No.6,232,107 ("the '107 Patent). Claim 1 recites, *inter alia*, "an isolated nucleic acid molecule encoding a *Renilla reniformis* green fluorescent protein, comprising a nucleotide sequence that encodes the protein of SEQ ID NO. 27 or a green fluorescent protein encoded by a nucleic acid molecule of *Renilla reniformis*". The Examiner asserts that the '107 Patent teaches an isolated *Renilla reniformis* polynucleotide comprising a coding sequence encoding a *Renilla reniformis* green fluorescent protein (GFP). As acknowledged by the Examiner on page 6, lines 7-8 of the Office Action dated March 9, 2004, "the polynucleotide sequence encoding the GFP protein sequence is not described in the Bryan et al. patent." The Examiner submits that the encoded protein sequence reads on SEQ ID NO. 27 of the present application because the source and GFP are the same in the '107 Patent. Different polynucleotide sequences can each encode the same protein, however, each of the different polynucleotide sequences is distinct and expressed differently within cells. Accordingly, the polynucleotide sequence recited in claim 1 has a different functional property and different form of expression in cells from other polynucleotide sequences. Applicants submit that regardless of whether the same protein is disclosed in the '107 patent and the present application, the polynucleotide sequence recited in claim 1 of the present application is not obvious from the encoded protein of the '107 patent. Applicants submit that the '107 Patent does not disclose, teach or suggest the isolated nucleic acid molecule encoding a *Renilla reniformis* green fluorescent protein, comprising a nucleotide sequence that encodes the protein of SEQ ID NO. 27 or a green

fluorescent protein encoded by a nucleic acid molecule of *Renilla reniformis* as recited in claim 1. Applicants submit that claim 1, and the claims that depend therefrom which assert additional features, are patentable over the cited references. Reconsideration and withdrawal of the rejection of claims 1-13, 22, 38-50 and 57-58 is requested.

Claims 1-13, 22, 38-50 and 57-58 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 5 of U.S. Patent No. 6,232,107. An obvious type double patenting rejection is proper when a claim in the in the application defines an invention that is merely an obvious variation of an invention claimed in the issued patent. Claim 1 of the present application recites "An isolated nucleic acid molecule encoding a *Renilla reniformis* green fluorescent protein, comprising a nucleotide sequence that encodes the protein of SEQ ID NO. 27 or a green fluorescent protein encoded by a nucleic acid molecule of *Renilla reniformis* having at least 80% sequence identity thereto." Claim 1 of the '107 Patent recites "An isolated nucleic acid fragment, comprising a sequence of nucleotides encoding Renilla mulleri luciferase, a Gaussia luciferase or a Pleuromamma luciferase, wherein the sequence of nucleotides is selected from the group consisting of a sequence of nucleotides set forth in SEQ ID No. 17, SEQ ID No. 19, or SEQ ID. No. 28; a sequence of nucleotides encoding the amino acid sequence set forth in SEQ ID No. 18, SEQ ID No. 20 or SEQ ID No. 29; or a sequence of nucleotides that hybridizes under high stringency to the sequence of nucleotides set forth in SEQ ID No. 17, SEQ ID No. 19 or SEQ ID No. 28." Claim 5 of the '107 patent recites "A plasmid, comprising the nucleic acid fragment of claim 1."

As acknowledged by the Examiner, claims 1-13, 22, 38-50 and 57-58 are not identical to the subject matter of U.S. Patent No. 6,232,107. Applicants further submit that claim 1 of the present application is not an obvious variation of the invention claimed in the '107 patent. Reconsideration and withdrawal of this rejection is requested.

In view of the foregoing remarks it is submitted that pending claims 1-13, 22, 38-50 and 57-58 are patentable over the references of record and, therefore, are in condition for allowance. Applicants respectfully request a timely Notice of Allowance be issued for the

present application. In the event that any outstanding matters remain in connection with this application, the Examiner is invited to telephone the undersigned at (412) 263-4362 to discuss such matters.

Respectfully submitted,

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